

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently amended) A coal-bed-methane water treatment system An apparatus for treating coal-bed-methane water, said coal-bed-methane water treatment system the apparatus comprising:

a pump system for delivering to deliver water from one or many at least one coal-bed-methane wells well into a common reservoir; and

a solid-based sulfurous generator that produces generator to produce aqueous sulfurous acid to treat the coal-bed-methane water that is contained in the reservoir; and

an injection system that injects to inject soluble gypsum into at least one of the aqueous sulfurous acid and the coal-bed-methane water to further treat the coal-bed-methane water in the reservoir.

2. (Currently amended) The apparatus according to of claim 1, further including comprising a control system for controlling to control the a water flow rate through the solid-based sulfurous generator to achieve the a desired concentration of sulfurous acid in the coal-bed-methane water being treated.

3. (Currently amended) The apparatus according to of claim 2, wherein said the control system includes comprises a pH sensor for ascertaining to ascertain the pH of the coal-bed-methane water being treated; a controller connected to said the pH sensor for receiving to receive a signal representative of the pH, comparing said the signal to a set point for a desired water pH,

and providing an output control signal, which affects a flow to a control means connected to said controller for adjusting to adjust the water flow rate through said solid-based sulfurous generator to achieve the a desired concentration of sulfurous acid in the water being treated.

4. (Currently amended) The apparatus according to of claim 3, wherein said flow the control means includes comprises a variable frequency drive (VFD) for adjusting the pump speed to control to adjust the water flow rate of water through said solid-based sulfurous generator, said pump system being the pump system that delivers coal-bed-methane water to said solid-based sulfurous generator.

5. (Currently amended) The apparatus according to of claim 3, wherein said flow the control means includes comprises a variable frequency drive (VFD) for adjusting to adjust the water flow rate through a valve to control the flow rate of water through said solid-based sulfurous generator, said the valve being located between said solid-based sulfurous the generator and said pump system that delivers water to said solid-based sulfurous controlling the water flow rate through the generator.

6. (Currently amended) The apparatus according to of claim 2, wherein said the control system includes comprises a flow rate sensor for determining to measure the water flow rate of water into said reservoir through the generator; a controller connected to said the flow rate sensor for receiving to receive a signal representative of the flow rate and providing to provide an output control signal to a flow control means connected to said controller for adjusting to adjust the

water flow rate through said solid-based sulfurous the generator to achieve the a desired concentration of sulfurous acid in the water being treated.

7. (Currently amended) The apparatus according to of claim 2, wherein said the control system further includes comprises a feed load cell for determining to determine the weight of sulfur being fed to said solid-based sulfurous the generator.

8. (Currently amended) The apparatus according to of claim 7, further including comprising a timer circuit for calculating the to calculate a feed burn rate based on the a change in the of an output of the feed load cell over time.

9. (Currently amended) The apparatus according to of claim 2, wherein said the control system further includes comprises a flow meter for measuring to measure the water flow rate of water through said solid-based sulfurous generator.

10. (Currently amended) The apparatus according to of claim 2, wherein said the control system further includes comprises a timer for to selectively starting start and stopping said solid-based sulfurous stop the generator.